

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listing of the claims in the application:

1-27. (Canceled)

28. (Currently amended) A method for distinguishing a leukemia of T cell, B cell, or myeloid lineage in a human subject comprising the steps of:

providing a single assay device comprising a derivatised solid support selected from the group consisting of glass, cellulose, ceramic material, nitrocellulose, polyacrylamide, nylon, polystyrene, polystyrene derivatives, polyvinylidene difluoride, methacrylate, methacrylate derivatives, polyvinyl chloride, and polypropylene, the derivatised solid support having an array of immunoglobulin molecules immobilized in discrete regions on the derivatised solid support, wherein the immunoglobulin molecules are specific for the single cell surface marker antigens of CD3, CD4, CD8, CD14, CD19, and CD56, and wherein each immunoglobulin region specific for said single surface marker is present only once in the array;

contacting a biological sample containing leukocytes ~~obtained from a human subject~~ with the assay device, wherein said biological sample is obtained from a human subject in need of a diagnosis of T cell, B cell, or myeloid lineage leukemia;

allowing leukocytes in the biological sample to bind to the immunoglobulin molecules on the solid support via cell surface marker antigens on the leukocytes to form a pattern of binding on an array of discrete regions each being specific for a single cell surface marker presented only once in the array; and

determining the relative scale of the pattern of simultaneous binding with which the cell surface marker antigens CD3, CD4, CD8, CD14, CD19, and CD56 on the leukocytes have bound to the immunoglobulin molecules on the array, wherein the relative scale of the pattern of CD3, CD4, CD8, CD14, CD19, and CD56 binding on the array distinguishes leukemia of T cell, B cell, or myeloid lineage in the subject.

29. (Currently amended) The method according to claim 28, wherein the derivatised solid support further contains, in addition to immunoglobulin molecules specific for the single cell surface marker antigens CD3, CD4, CD8, CD14, CD19 and CD56 of claim 28, at least one immunoglobulin discrete regions of immunoglobulin molecules specific for single cell surface marker antigens of a T cell, B cell, or myeloid lineage ~~selected from the group consisting of~~ consisting of CD2, CD5, CD7, CD9, CD10, CD11b, CD11c, CD13, CD15, CD16, CD20, CD21, CD22, CD23, CD24, CD25, CD33, CD34, CD36, CD37, CD38, CD41, CD42a, ~~CD44, CD44v3-10, CD44v6, CD45, CD45RA, CD45RO, CD52, CD57, CD60, CD61, CD64, CD71, CD79a, CD79b, CD80, CD95, CD103, CD117, CD122, CD134, CD138, CD154, Kappa, Lambda, GPA, HLA-DR, KOR, FMC7, Anti-hlg, and Anti-Ig as herein listed in Example 9, Tables 4 to 8 and Figures 7a and 8a.~~

30. (Currently amended) The method according to claim 28, wherein the derivatised solid support, in addition to immunoglobulin molecules specific for the single cell surface marker antigens CD3, CD4, CD8, CD14, CD19 and CD56 of claim 28, further contains ~~[[39]]~~ immunoglobulins specific for single cell surface marker antigens selected from the list in Table 8 mIgG1, CD2, CD5, CD7, CD9, CD10, CD11b, CD11c, CD13, CD15, CD16, CD20, CD21, CD22, CD23, CD24, CD25, CD33, CD34, CD36, CD37, CD38, CD41, CD42a, CD45, CD45RA, CD45RO, CD52, CD57, CD61, CD71, CD95, CD103, CD117, CD122, CD154, GPA, HLA-DR, KOR, and FMC7.

31. (Currently amended) The method according to claim 28, wherein the derivatised solid support, in addition to immunoglobulin molecules specific for the single cell surface marker antigens CD3, CD4, CD8, CD14, CD19 and CD56 of claim 28, further contains ~~[[44]]~~ immunoglobulins specific for single cell surface marker antigens selected from the list in Table 4 mIgG1, mIgG2a, mIgG2b, mIgM, CD2, CD5, CD7, CD9, CD10, CD11b, CD11c, CD13, CD15, CD16, CD20, CD21, CD22, CD23, CD24, CD25, CD33, CD34, CD36, CD37, CD38, CD41, CD42a, CD45, CD45RA, CD45RO, CD52, CD57, CD60, CD61, CD71, CD79a, CD95, CD103, CD117, CD122, CD154, GPA, HLA-DR, KOR, FMC7, and anti-hlg.

32. (Currently amended) The method according to claim 28, wherein the derivatised solid support, in addition to immunoglobulin molecules specific for the single cell surface marker antigens CD3, CD4, CD8, CD14, CD19 and CD56 of claim 28, further contains [[42]] immunoglobulins specific for ~~single cell surface marker~~ antigens selected from the list in Table 5, 6, or 7 mIgG1, CD2, CD5, CD7, CD9, CD10, CD11b, CD11c, CD13, CD15, CD16, CD20, CD21, CD22, CD23, CD24, CD25, CD33, CD34, CD36, CD37, CD38, CD41, CD42a, CD45, CD45RA, CD45RO, CD52, CD57, CD60, CD61, CD71, CD79a, CD95, CD103, CD117, CD122, CD154, GPA, HLA-DR, KOR, FMC7, anti-hIg.
33. (Currently amended) The method according to claim 28, wherein the derivatised solid support t, in addition to immunoglobulin molecules specific for the single cell surface marker antigens CD3, CD4, CD8, CD14, CD19 and CD56 of claim 28, further contains [[44]] immunoglobulins specific for ~~single cell surface marker~~ antigens selected from the list in Figure 7a mIgG1, CD2, CD5, CD7, CD9, CD10, CD11b, CD11c, CD13, CD15, CD16, CD20, CD21, CD22, CD23, CD24, CD25, CD33, CD34, CD36, CD37, CD38, CD41, CD42a, CD44, CD44v3-10, CD44v6, CD45, CD45RA, CD45RO, CD52, CD57, CD60, CD61, CD71, CD79a, CD95, CD103, CD117, CD122, CD154, GPA, HLA-DR, KOR, FMC7, mIgG2a, mIg2b, mIgM.
34. (Currently amended) The method according to claim 28, wherein the derivatised solid support, in addition to immunoglobulin molecules specific for the single cell surface marker antigens CD3, CD4, CD8, CD14, CD19 and CD56 of claim 28, further contains [[52]] immunoglobulins specific for ~~single cell surface marker~~ antigens selected from the list in Figure 8a mIgG1, CD2, CD5, CD7, CD9, CD10, CD11b, CD11c, CD13, CD15, CD16, CD20, CD21, CD22, CD23, CD24, CD25, CD33, CD34, CD36, CD37, CD38, CD41, CD42a, CD44, CD44v3-10, CD44v6, CD45, CD45RA, CD45RO, CD52, CD57, CD60, CD61, CD64, CD71, CD79a, CD79b, CD95, CD103, CD117, CD122, CD134, CD138, CD154, Kappa, Lambda, GPA, HLA, KOR, FMC7, Anti-Ig, IgG2a.
35. (Currently amended) The method according to claim 28 [[29]], wherein the relative scale of the pattern of simultaneous ~~concurrent~~ binding is detected microscopically, biochemically, histochemically or immunologically.

36. (Currently amended) The method according to claim 35, wherein the relative scale of the pattern of simultaneous binding is detected microscopically.

37. (Currently amended) The method according to claim 28 ~~[[29]]~~, wherein the immunoglobulins are monoclonal antibodies.

38. (Currently amended) The method according to claim 28 ~~[[29]]~~, wherein the immunoglobulins are polyclonal antibodies.

39. (Currently amended) The method according to claim 28 ~~[[29]]~~, further comprising microscopic analysis of cellular morphology of the leukocytes.

40. (Currently amended) The method according to claim 28 ~~[[29]]~~, further comprising histochemical, biochemical, or immunological analysis.

41. (New) The method according to claim 28, wherein the solid support is nitrocellulose film supported on glass.